Special Section: Focus on Partners for Fish and Wildlife (pages 9–40)

On the following pages, in honor of our state, federal, private and tribal partners, Fish and Wildlife News *present this special section highlighting the myriad accomplishments of the Partners for Fish and Wildlife Program.*

Since 1987, the Partners for Fish and Wildlife Program has helped over 24,000 private landowners restore: 526,000 acres of wetlands, 550,000 acres of native prairie grasslands, 3,200 miles of streamside and in-stream aquatic habitat; and remove over 70 barriers to fish passage.

More than 1 Million Acres Restored

Since 1987, the Partners for Fish and Wildlife program has worked in cooperation with thousands of landowners and conservation partners to restore more than a million acres of privately owned fish and wildlife habitat nationwide.

Originally a pilot project in western Minnesota, Partners' technical assistance was first offered to local landowners to restore "prairie potholes" in the Midwest. Today more than 24,000 landowners throughout the United States have voluntarily participated in the program. Biologists and partners have restored some 526,000 acres of important wetlands, 550,000 acres of associated uplands and 3,200 miles of riparian and in-stream aquatic habitat.

Voluntary participation in this popular program allows landowners to retain all previous ownership rights and responsibilities—including the right to limit public access—on their restored land. State and local agencies, conservation organizations and individuals support Service biologists with contributions of financial and in-kind services, that have helped offset construction costs for many projects.

"The Partners program is a wonderful model for modern conservation initiatives, especially in the Fish and Wildlife Service," says Cathleen Short, Assistant Director of Fisheries and Habitat Conservation. "It's attractive in so many ways—pro-active, result-oriented, landowner-friendly, and so simple. Through the Partners program almost twenty-five thousand private landowners have joined with the Service in improving habitats for fish and wildlife, not because they had to or were forced to, but because they wanted to!"

Objectives of the Partners program are: restore wetlands, associated uplands and stream corridors to benefit migratory birds, endangered species and native fish and wildlife species on private, non-federal and tribal lands; promote a net gain of wetlands and wetland-dependent fish and wildlife species through on-the-ground projects; and encourage non-federal partners to share the expenses of many restoration projects.

Steve Kufrin, Partners for Fish and Wildlife, Minneapolis, Minnesota

A Primer for the Partners Program

When did the Service begin working with private landowners?
The late 1970s and 1980s saw a severe drought across much of the Midwest. Prairie pothole wetlands in the Great Plains states dried up and waterfowl populations declined. It was during this period that the Service, through a number of new and innovative programs such as the Mid-continent Waterfowl Research Project, first began to work with private landowners.

How did we get involved with production agriculture?
In 1985, Congress passed the Food Security Act, which contained provisions for wetland restoration and other conservation programs. One of these programs provided for wetland restoration on lands temporarily owned by the Farmers Home Administration. The Service worked closely with the U.S. Department of Agriculture to restore a number of these wetlands, many of which were located in the lower Mississippi River Valley. The Service also worked to restore wetlands on agricultural lands enrolled in the Conservation Reserve Program. The first Partners for Fish and Wildlife funds for technical assistance and financial assistance on private lands were appropriated to support these activities.

The Service soon discovered that many landowners were interested in voluntarily restoring wetlands on their own lands.

When did the Partners program come into being?
Officially established in 1987 as a wetland restoration program, the Partners for Fish and Wildlife program has grown and expanded to include all types of habitat restoration including riparian, native grassland and prairie, estuarine, threatened and endangered species, in-stream, and many other fish and wildlife habitats. The Partners program works in cooperation with individual landowners and tribal governments to restore fish and wildlife habitat on private and tribal lands.

More than 70 percent of the nation's fish and wildlife habitats are on private lands. Private landowners make significant contributions to the restoration, conservation and protection of fish and wildlife species on their own lands. The Service provides financial and technical assistance to landowners to accomplish these habitat projects.

A Voice of Experience Discusses the Partners Program

Carl Madsen is known to many as one of the founding fathers of the Partners for Fish and Wildlife Program.

In 1978, the Service assigned Madsen the task of developing and implementing a private lands habitat restoration pilot project in west-central Minnesota. He delved into biological methods and the sociological and institutional framework that controls private land habitat restoration. The success of Madsen's pioneering work spurred the Service's implementation of the national Partners program.

Currently stationed at the Brookings Wildlife and Habitat Office in South Dakota, Madsen has been recognized by his peers as a leading thinker on the issue of accommodating wildlife production with profitable private land ownership. He received The Wildlife Society's Minnesota Award and South Dakota Award and a Fish and Wildlife Service Meritorious Service Award. He is also the only non-Agriculture Department recipient of the Conservationist of the Year Award bestowed by the National Association of Conservation Districts.

FWS: How did the private lands program begin within the Fish and Wildlife Service?
Madsen: In the mid-1950's, there was a growing awareness within the Service and other wildlife agencies of an urgent need to stem the accelerating losses of wetlands because of agricultural practices, especially in the Prairie Pothole region. Congress passed legislation allowing the Service to purchase and manage small wetland tracts and buy easements on other wetlands to add to national wildlife refuge lands in the region. The Service also began assisting private landowners, mostly farmers, in maintaining and developing waterfowl habitat on private lands surrounding Service lands.

Concern for dwindling duck numbers in the mid-1970s led to the formation of the Mid-Continent Mallard Management Group, made up of waterfowl managers from the northern states, the Canadian prairie provinces and private organizations, to seek ways to restore mallard populations. The group concluded that without population recruitment from private lands there would be little hope of recovering formerly high mallard numbers or other wildlife populations.

Vanguard. *Pioneering biologist Carl Madsen helped launch the Partners for Fish and Wildlife program. FWS photo.*

When did the Service first get involved with providing habitat assistance to private landowners?
In 1978, the Service began a field level effort called the Mid-Continent Waterfowl Management Project to try new waterfowl management techniques in western Minnesota and look for a population response. That project focused on private land activities in relation to the state and federal lands in the area.

As project leader for the mid-continent project at Fergus Falls, Minnesota, from 1978 to 1988, I helped to develop working partnerships with Ducks Unlimited, the Minnesota Waterfowl Association, local soil and water conservation districts, sportsmen's clubs, state legislators and national congressional staff.

What were early projects like?
We began a "mini-Conservation Reserve Program" which became a model for some aspects of the current USDA program. We ran ground nest predation management trials, devised and implemented a wetland tax credit, and began no-till seed drill trials by buying specialized equipment with local conservation districts.

What's the best way to establish landowner support for private lands projects?
First and foremost, get to know landowners and other players, and bring them together. A farmer once told me, "We used to hate you guys 'til we got to know you." I've never found a substitute for one-on-one relationships between Service private lands people and the partners we need. There is no better way to gain the trust of farmers and ranchers to carry out habitat programs on private lands than to work one-on-one across the hood of a pickup or at the kitchen table.

Can you give us an example of how a project works?
The trick is to find a way to develop, restore or enhance some wetlands in close proximity to grass in a way that fits into the landowner's need to operate the farm or ranch efficiently—and hopefully profitably. We listen to the landowner and find the features that are valued as an integral part of the business, usually water for livestock and grass for forage. When we find out what the landowner needs and wants, then the challenge is for us to find a design that will give our cooperators what they need and still meet our objectives in habitat development as well as those of our funding partners.

For example, a rancher might have a block of native grass used for grazing cattle. This grass could be converted to row crops which might be more profitable to the landowner, but destroy wildlife habitat. The Service could build a livestock water pond and design and provide fencing materials for the rancher to construct a rotational grazing system. The rancher keeps the livestock, the livestock graze the land more effectively, the rancher profits, the grass stays and so does the wildlife habitat.

How would you characterize the Partners program today?
The program varies from state to state and region to region. This reflects the bottom up development of the program and recognizes the need to address local issues with local planning. It is tailored to address issues and opportunities in each state and remain flexible enough to develop individual plans for individual landowners. The real strength of the Partners program is flexibility.

What do you think the future holds for the Service's private lands programs?
Today the program is well known within the Service and well respected by our partners. I believe the concept of a Service presence on private lands is here to stay because of the benefits this relationship provides to both wildlife and to the people who have come to know us through this program. I see the program growing into a unique arm of the Service that delivers customer-oriented products of habitat restorations and development tailored to custom fit the specific needs of people and wildlife throughout the nation.

Region 1

Partners Help Balance Competing Resource Interests through Partnering

Digging for a solution. *The Service works with partners on projects aimed at balancing wildlife needs and those of landowners. FWS photo.*

In this year of record drought in some parts of the nation, some solutions for improving habitat and mending the agricultural community in the troubled Klamath Basin region of northern California and southern Oregon are found in the Partners for Fish and Wildlife program, which provides technical advice and funding to help landowners realize the goals of making their land a better place for wildlife and a better place for the community.

The Partners program has been working in the Klamath Basin for eight years, implementing more than 50 projects to improve fish and wildlife habitat on private lands. Through the Partners program, the Service and private landowners are working together toward common goals to help solve or assuage competing resource challenges in the Klamath Basin.

More than half of the Upper Klamath Basin's wetlands have been diked and drained. Changes to riparian areas and degradation of stream channels have altered the natural hydrologic function. Unequalized channels cannot handle the sediment load, and eventually erode. When stream channels are unstable, adjacent riparian and upland areas do not retain water properly, drain more quickly, and experience altered vegetation and stream flow release timing.

How does the Service work toward regaining stability of stream systems? Enhanced water quality begins with improving wetland and riparian habitats. By working with the Partners for Fish and Wildlife Program, private landowners in the Klamath Basin restore hydrology functions by reconnecting stream channels with their floodplains, improving riparian habitat and providing for a slower release of water flows.

Partners biologists are helping to improve roads and restore habitat in riparian and upland areas by moving roads from meadows and other sensitive areas. Replacing undersized culverts with correctly sized and properly installed culverts is improving water flows and in-stream habitat. Biologists are also helping to reduce erosion and improve fish habitat and passage by placing large woody debris and rock in the area, and undertaking streambank protection projects. Revegetation and fencing projects reestablish functional riparian habitat.

Curt Mullis, Ecological Services, Klamath Falls, Oregon

A Field Biologist's View of the Partners Program

by Kathleen Fulmer

My career as a professional biologist began 10 years ago as a "hybrid" Service employee. I was stationed at a national wildlife refuge and wore a uniform, but I was detailed to Ecological Services to carry out the Partners for Fish and Wildlife program. The Washington State Ecosystem Conservation Partnership, an alliance between the Service and the Washington Department of Fish and Wildlife, blossomed into a geographically-based initiative under the Partners program. No longer a hybrid, I now carried out private lands work through both the Partners and the Washington State programs.

Over the years, the Partners program and the Service's work with private landowners has matured. In those early years, we were overjoyed simply to restore a depression, supply water and shake the landowner's hand after agreeing to call it good for 10 years (I must admit that I miss those handshake agreements). By 1994, we could hardly keep up with the requests from private landowners. We also were drawn by necessity into considering the bigger picture: wetland complexes, watersheds and unique ecosystems.

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Region 1

A Field Biologist's View of the Partners Program (continued)

I left Ecological Services in 1995 to work again for the refuge system, but during the next five years, the benefits of the Partners program continued to surface. Off-refuge land practices had degraded water quality on the refuge; private lands funding encouraged adjacent landowners to fence cattle out of the stream. Thousands of school children visited the refuge each year; the Partners program assisted teachers in setting up outdoor classrooms with native habitat near their schools to complement field trips. Expanding the refuge's boundary was becoming controversial; the Partners program allowed landowners to voluntarily restore native habitat on their own lands rather than the Service purchasing land.

I recently returned to work with the Partners program. The Partners program and its people no longer reflect those simpler projects of the early years. Now we work to recover entire watersheds or restore passage for threatened and endangered fish. We work with more numerous and complex partners—tribes, local governments, nonprofit groups, watershed committees—and accommodate more diverse interests.

But in a very important way, nothing has changed. The Partners program is still the most versatile form of outreach that we offer communities beyond refuge boundaries and Service offices.

Kathleen Fulmer is a biologist at the Spokane Fish and Wildlife Office in Washington.

Nevada Project Helps River and Fish

"Yesterday another load of 1,450 pounds of trout arrived from the Truckee River—all large fine ones."

"The Truckee affords the finest quality of trout to be found anywhere, many of them weighing from 15 to 20 pounds."

Local newspapers made hundreds of statements such as these about Nevada's bountiful Truckee River, which flows from Lake Tahoe to Pyramid Lake.

Unfortunately, such statements were made in 1865.

By the late 1930s, Lahontan cutthroat trout could not be found in the Truckee River because their habitat had been damaged by irrigation diversions, hydroelectric dams, population growth, invasive plants, over-allocation of water rights, non-native fish introduction, flood control projects and degraded water quality. The Truckee even has its own Congressional legislation (P.L.101-618) and an operating agreement that is still under negotiation. Restoration of the Truckee is critical to recovering endangered Lahontan cutthroat trout and the endangered Cui ui.

Nevada's Partners program is working with The Nature Conservancy and other groups to initiate a riparian and upland revegetation project at the McCarran Ranch, a 400-acre parcel just east of Reno that is bisected by 5 miles of the Truckee River. At the ranch, which TNC recently acquired, the river has been channelized and much of the riparian corridor and upland habitat converted for crops and grazing. The Nature Conservancy is working with numerous partners to restore riparian habitat and native upland vegetation as well as the river's grade and meanders.

Biologists will restore and revegetate at least half a mile of river bank, removing exotic plants from 5 acres of upland and planting native species. This project will contribute to Lahontan cutthroat trout and Cui ui recovery by reducing sedimentation and by providing cover and structure along the riverbank.

"This is a terrific opportunity to take a very degraded section of the river and restore great fish and wildlife habitat," says Laurie Sada, Partners for Fish & Wildlife coordinator for the Nevada Fish & Wildlife Office. "It also will turn former pasture land into a beautiful preserve for the public to enjoy."

Other partners involved with the McCarran Ranch project include the State of Nevada, the Bureau of Reclamation, U.S. Army Corps of Engineers, private donors and several foundations. It is the largest restoration project ever to be undertaken along the Truckee River, and it is building upon the efforts established under P.L. 101-618 in the lower Truckee to assist in recovery of the Lahontan cutthroat trout.

"This is a high visibility project with its proximity to Reno and the fact that you can look down on it from Route 80," says Sada. "In addition to the habitat that will be gained, the success of this large, multi-partner restoration effort is important to the Service because it will hopefully catalyze additional projects along the Truckee."

Randi Thompson, Ecological Services, Reno, Nevada

"Working with landowners one-on-one, sharing their dreams and getting our hands dirty together, is the true joy of working in the Partners program. The privileges of working in this program include not only the excitement of being a part of a nationwide effort to bring back fish and wildlife but also the honor of working with motivated and caring private landowners."

Martha B. Naley, chief of the Branch of Habitat Restoration and national Partners for Fish and Wildlife coordinator

Twin Creek Gets Duplicated

A diverse group of partners came together in the northern panhandle of Idaho to restore Twin Creek, a bull trout spawning stream, to its former glory in the largest private lands stream restoration project Region 1 has designed in-house.

The Service listed the bull trout as threatened in 1998 because of habitat loss. At one time, more than 200 bull trout migrated up Twin Creek from the Clark Fork River each fall to make nests, called redds, and lay their eggs. In the 1950's, Twin Creek was straightened and deepened to make room for agriculture. Since then the creek has become wide and shallow with little streamside vegetation. Because of these changes to the creek and other factors in the Clark Fork watershed, Idaho Fish and Game biologists now find fewer than 10 bull trout redds in Twin Creek.

The Ruen family homesteaded on Twin Creek and still owns most of the 11-square-mile watershed. A few years ago, the Ruens asked Idaho Fish and Game Department for assistance in restoring the lower mile of Twin Creek, where it was channelized. In 1998, the Partners for Fish and Wildlife Program—along with Idaho Fish and Game, the Ruen family, Trout Unlimited, and Avista Corporation–began to develop a plan to restore Twin Creek.

The partners agreed that the best way to restore the creek would be to duplicate its former narrow, meandering channel pattern and profile. The Service designed the new channel to recreate the natural channel and began construction last summer.

Biologists from Idaho Fish and Game and the Service, wielding excavators and backhoes, worked for more than two months to construct the new channel. The partners built a new bridge on the county road to accommodate the new channel alignment. A team of volunteers from Trout Unlimited helped plant hundreds of trees and shrubs along the new channel.

The project was completed in July, and the water was turned out of the old channel and into the new. The partners hope the bull trout and other native fish will return to enjoy their restored home.

Juliet Nachman, Ecological Services, Spokane, Washington

Wildlife and Landowners Benefit from California Projects

Before. *Pete's Creek Ranch before partnership with Partners. See page 14 for after Partners improvements. FWS photo.*

California's rural lands provide exceptional opportunities for restoring and improving native habitats for fish and wildlife. The Partners for Fish and Wildlife program reaches out to landowners interested in conservation on their property–and true to its name, the program is forming solid partnerships, helping landowners restore habitat and expanding alliances to include other agencies and organizations that can bring additional expertise and funds to the table.

An example of that cooperative spirit is found at Pete's Valley Ranch in central California. Comprising 1,200 acres of wet meadows, wetlands, riparian habitat and sagebrush uplands, Pete's Creek has been managed since the 1940's as a cow/calf operation with season-long grazing that included intense use of the wetland and riparian areas.

The loss of willows, sedges and other streamside vegetation led to substantial erosion and down-cutting of the creek, lowering the water table in adjacent meadows. In turn, the meadows dried out earlier each year, allowing sagebrush to encroach. Two dams placed in Pete's Creek further degraded its value for fish.

Pete's Creek Partnership purchased the ranch in 1993 and the new owners realized that the existing grazing management system had a detrimental effect on the ranch's productivity and profitability. The new owners, disturbed by the decline of fish and wildlife habitats in the creek, wet meadows and uplands, sought financial and technical assistance to restore the damaged lands.

One of the owners, Darrell Wood, contacted the Service about the Partners for Fish and Wildlife Program, and the Natural Resources Conservation Service to see if any of the Farm Bill conservation programs could fund their project.

Service and Natural Resources Conservation Service staff met with Wood at the ranch in 1997 to discuss the proposed project. Because the anticipated benefits to fish, wildlife, wetlands, and water from the project would be so significant, both the Service, through the Partners program, and Natural Resources Conservation Service contributed funds.

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Wildlife and Landowners Benefit from California Projects (continued)

"Partners for Fish and Wildlife and these other programs have allowed me to make improvements to the ranch that would not be financially feasible otherwise," said Wood.

Biologists fenced and permanently excluded cattle from 1¼ miles of Pete's Creek, establishing a riparian buffer and removing the dams to return the creek to historic flow levels. Additionally, 120 acres of dense invasive sagebrush were removed promoting the reestablishment of native perennial grasses and forbs.

Now, four years later, a dense riparian growth of sedges, forbs, grasses and willows provides feeding and breeding habitat for migratory songbirds. Mallards nest in dense cover along Pete's Creek. Pronghorn antelope are abundant and have access to the improved forage along the creek through the wildlife-friendly fence. A sage grouse "lek" (courting site) is located on the ranch and as many as 100 sage grouse have been seen on the property at one time. Sage grouse nest in the upland adjacent to the creek, and chicks and hens can be seen foraging among forbs and perennial grasses in the riparian area.

After the 10-year Partners agreement has been completed, the landowners may choose to allow cattle to graze along the creek—but more likely, they may not. Because of the partnerships developed between the landowner, the Service and others, Pete's Creek Partnership achieved the goals of increasing the water holding capacity of the land and decreasing erosion along the stream and upland areas. The owners also derived an economic benefit; livestock carrying capacity has increased from 200 to 300 pairs and weaning weights have increased from 400 to 650 pounds.

Daniel Strait, Ecological Services, Sacramento, California

Successful endeavor. *Mallards nest along Pete's Creek, pronghorn antelope are abundant, and as many as 100 sage grouse have been seen on the property at one time. FWS photo.*

Advice for the Work-lorn

Dear Dr. Wildlife,
I have a peculiar problem…I really like my job! I have been a regional Partners for Fish and Wildlife program coordinator since 1992. It's a great job and a great program, and although I don't get to do the "real" work (the on-the-ground stuff) that our field Partners coordinators do, I find my job fulfilling. It's a great feeling helping the local coordinators get projects off the ground. I like answering all their questions ("Can we pay for this?" "One of our partners wants to modify the agreement, is that okay?"). I like getting money to them for projects. I love doing field reviews and seeing the results of their hard work. I especially love talking to the landowners and hearing the pride in their voices when they tell me what wildlife has come to their projects!

So what's the problem, you ask? Well, 10 years in one job must be considered weird because I seem to be asked with more and more frequency whether I am moving on or moving up. People seem to think I should be looking for a new job. But I don't want another job. I like the one I have! What should I do?

Misunderstood from Portland, OR

Dear Misunderstood,
I suggest you stand up to anyone who asks and tell them: "I love the Partners for Fish and Wildlife program! And I'm not leaving!"

Region 2

A Creek for Critters

A legacy to be handed down. *Gordon Latzko and his grandchildren enjoying Critter Creek. FWS photo.*

Not everyone in Texas owns a large, sprawling ranch. Small acreage landowners can make a difference for wildlife too. Gordon Latzko is proof of that.

After spending months cleaning up the trash and debris left by the previous landowner, Latzko was ready to start improving the wildlife habitat on his 16-acre tract of land, named Critter Creek. He discovered the Partners program in 1994, and embarked on a series of habitat improvement projects. Through the Partners program, Latzko has established four small emergent wetlands, totaling approximately four acres, on his land. He also enhanced a small remnant of native prairie. Because of his tireless efforts, thousands of migratory birds stop over at Critter Creek each year.

Latzko has enjoyed working with the Service and the Partners program.

"I have been associated with conservation all my life," he said recently. "Of all the programs I have been involved with over the years, this is the most rewarding and landowner-friendly program of them all."

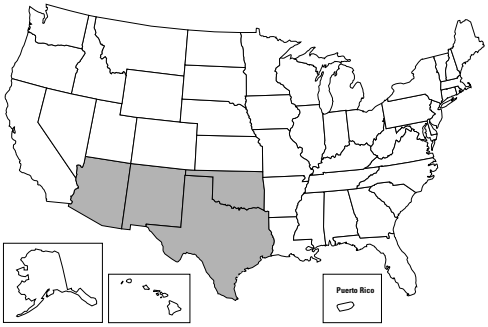
When asked why he became interested in the Partners program, Latzko also said, "There are two reasons I enrolled in the Partners program. I ached to do something for the critters I love, and I long to leave this legacy to my grandchildren, whom I love more than anything."

In 1996, Latzko was a runner-up for the Environmental Law Institute's prestigious Stewardship of the Year Award. That same year, he was honored as Conservationist of the Year in the 53-county Region V of the North Central and Central Texas Soil and Water Conservation Districts.

Such accolades are difficult to achieve for small landowners. But, as Latzko said, "small landowners are the backbone of the country and surely the most productive seeds of the Partners for Fish and Wildlife Program."

Don Wilhelm and Mike McCollum, Ecological Services, Arlington, Texas

Region 2



Ranchers Grow Grass for Livestock and Wildlife

Ground zero. *Data gathered on the Creamer ranch showed that the ranch was in the heart of prime prairie-chicken habitat. FWS photo.*

Roy and Shirl Creamer own and lease 22,000 acres of prairie grassland in eastern New Mexico. Their livelihood, they say, "is growing grass and raising livestock."

Fortunately, they are also conservationists. When a Partners program representative approached them, the Creamers were receptive to the idea of managing their land to improve conditions on the ranch, not only for their livestock operation, but also for the lesser prairie-chicken, a species of concern to the Service.

In addition to finding a conservation-minded ranching couple, Partners also found other government agencies willing to devote resources to conserving the lesser prairie-chicken. The local Natural Resources Conservation Service office, the local State of New Mexico Land Office, the local Resource Conservation and Development board, the New Mexico Department of Game and Fish prairie-chicken biologist, two Partners Program biologists from Texas and Oklahoma, and the prairie-chicken biologist from the Bureau of Land Management gathered data on the prairie-chicken on the Creamer ranch. The data showed that the ranch was in the heart of prime prairie-chicken habitat, and with a management plan of livestock rest-rotation by the rancher, the habitat conditions could be improved even more for the lesser prairie-chicken.

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Ranchers Grow Grass (continued)

For wildlife. *With a management plan of livestock rest-rotation, the Creamers improved their habitat conditions even more for the lesser prairie-chicken. FWS photo.*

At crucial times, the nearby Service migratory bird biologist, who received a graduate degree on management of lesser prairie-chickens, also devoted his time and expertise to this endeavor. This cooperative partnership of agencies and committed individuals, especially the Creamers, insured the success of this venture.

Because of the positive relationship established with the Creamers, other ranchers in the area are interested in the program and have asked the Partners biologists to evaluate their ranch for management options. Within the next two years the Partners program hopes to develop landowner agreements with six other ranchers near the Creamers, to generate livestock management plans and improve a total of 100,000 acres for the ranchers and the lesser prairie-chicken.

Chuck Mullins and Denise Smith, Ecological Services, Albuquerque, New Mexico

Healing Habitat Along the San Pedro River

Injured place. *Looking upstream at the location of the boulder barrier site along the lower San Pedro River prior to the project. FWS photo: Marty Jakle.*

For years, all-terrain vehicle traffic has degraded riparian habitat along Arizona's lower San Pedro River near its confluence with the Gila River. The Partners for Fish and Wildlife program in Arizona worked with The Nature Conservancy to close a portion of the San Pedro River stream corridor to ATV access, protecting habitat for federally listed and sensitive species such as the southwestern willow flycatcher.

To keep ATVs from crossing the river on property it owns, The Nature Conservancy asked the Partners program for financial assistance to create a permanent but natural vehicle barrier. The barrier uses a number of large boulders placed in the stream about 3 feet apart in a "V" pointing upstream. The boulders prevent all-terrain vehicle use without interfering with stream flow.

The Service has designated this portion of the San Pedro as critical habitat for the cactus ferruginous pygmy owl, southwestern willow flycatcher, loach minnow and spikedace. Southwestern willow flycatchers are known to breed in the immediate area. In addition to federally listed species, the area provides habitat for a broad array of neotropical migratory birds including the yellow-billed cuckoo, gray and black hawks, Mississippi kite, streaked-backed oriole, summer tanager, and tropical kingbird.

This project has been quite successful, according to participants. Vehicles have been kept out of the stream, allowing the habitat to heal. The success of this project was assured because it was "low tech" and low maintenance. It was set in place one morning and has been working around the clock ever since.

Marty Jakle, Ecological Services, Phoenix, Arizona

All better now. *The boulder barrier in place. FWS photo: Marty Jakle.*

Partners Can Profit, Too

Jim Bill Anderson, a rancher in Hemphill County, Texas, wanted to improve upland habitat conditions for the lesser prairie-chicken without giving up his cattle operation. He also wanted to restore Cat Creek, a riparian area on his ranch. He discovered that the Partners program was the perfect way to help accomplish his goals.

This partnership resulted in a grazing system that allows him to better use his available native forage, and establish a more wildlife-friendly riparian area and a buffer zone consisting of two distinct pastures.

The complementary forage system has enabled Anderson to enhance riparian and upland habitat conditions while maintaining existing livestock numbers.

"I think landowners will find that these practices will make their grasslands more profitable," he said. "So, you are doing the most economically viable thing and it's also the most responsible stewardship direction you can take. They go hand in hand."

Each riparian pasture is grazed by domestic livestock during the late spring and early summer on alternate years to ensure use does not exceed 25 percent of annual forage production. Establishing a buffer zone allowed Anderson to reduce grazing intensity on adjacent uplands and improve lesser prairie-chicken nesting cover quality.

In the buffer zone, important climax grass species such as eastern gamagrass, switchgrass, and prairie cordgrass have become more abundant. On adjacent upland sites, lesser prairie-chicken nesting habitat has been enhanced by increasing the amounts of sand bluestem and little bluestem grasses.

John P. Hughes, Ecological Services, Canadian, Texas

Outdoor Classrooms Thrive

Hands-on. *An estimated 2 million students and adults across Oklahoma will use outdoor environmental leaning centers during the projected life of the project agreements. Service biologists teach students—as well as their teachers—about wetland habitat. FWS photos.*

Public interest in a healthy environment is growing exponentially. Providing students, educators and communities with opportunities to teach and learn about natural resource issues is now a priority for the Partners program in Oklahoma.

The Partners program coordinates the development of 77 outdoor classrooms on school lands by providing "seed money" and technical assistance, and helping organize technical and financial assistance from state and federal agencies, civic organizations, businesses, and private conservation organizations. These "hands on," interactive outdoor classrooms provide an ideal structured environment for educating young people about natural resource issues. They also provide long-term educational opportunities, high value fish and wildlife habitats, and ultimately understanding and support for natural resources.

The Mustang North-Creek Outdoor Classroom emphasizes wetlands and endangered and threatened ecosystems. Located on a 6-acre site, which includes a 1.5-acre wetland, this area includes various interpretive and interactive educational displays, as well as artificial nesting boxes, walkways, bridges, wildlife observation blinds, tree plantings and other wildlife plantings.

An estimated 2 million students and adults across Oklahoma will use these outdoor environmental learning centers during the 15 to 20-year projected life of the agreements. The Oklahoma Conservation Commission and Oklahoma Department of Wildlife, in cooperation with other state and federal agencies, provide training workshops for educators on wildlife and wetland curriculum for students in all grades. These workshops teach the functions, values and conservation of wetlands and other endangered ecosystems, and stress topics such as wetland ecology, threatened and endangered ecosystems, and sound conservation practices.

Jontie Aldrich, Ecological Services, Tulsa, Oklahoma

Restoration and Education Go Hand-in-Hand

Restored and reused. *Kimberly DeCastro coordinates with nearby schools and promotes the use of her restored land as a place for schoolchildren to visit and learn about our natural heritage and natural resources. FWS photo.*

Mother and daughter Kimberly and Jenna de Castro have not only been eager participants in the Partners program, restoring habitat on their New Mexico ranch, they also have allowed students to learn valuable lessons by opening their land to outdoor education programs.

The de Castros, recipients of a 1998 national wetland award from the Environmental Law Institute, own 50 acres of upland and floodplain next to the Pecos River, some 30 miles east of Santa Fe. The Pecos River is a major waterfowl flyway and crucial for resident and migratory wildlife. Kimberly manages her entire 50 acres to benefit wildlife, including two wetlands that were rehabilitated through a cost-share agreement with the Partners program.

In addition to restoring the wetlands, Kimberly was interested in enhancing her upland. She fenced out livestock and planted more than 5,000 individual upland and riparian plants, consciously selecting plants that had value for endangered species. She purchased over 10 tons of straw bales with grass seed to treat erosion "hot spots," areas that had been created by mismanagement of the previous landowners.

Perhaps the most important thing Kimberly has done with her restored grasslands and wetlands is to allow them to be used as an outdoor biological laboratory for schoolchildren. Kimberly actively coordinates with nearby schools and promotes the use of her land as a place for children to visit and learn about natural heritage and natural resources. More than 500 schoolchildren visit her property each year, learning the value of proper stewardship of the land. Children who visit the property might happen to see ducks and geese stopping to rest or feed. They might catch a glimpse of a fox or roadrunner out on a hunt or a deer quietly browsing near the wetland.

Chuck Mullins and Denise Smith,
Ecological Services,
Albuquerque, New Mexico

River Restoration Project Thrives in the Desert

One important aspect of Partners for Fish and Wildlife is support for national wildlife refuges. The Partners program, Imperial and Cibola national wildlife refuges, and four private landowners recently joined forces to restore native riparian habitat and plant native trees along the lower Colorado River at the Clip Mill site north of Yuma, Arizona.

The project is doing well despite the harsh desert environment, where summer temperatures can reach 120 degrees Fahrenheit. About three quarters of the trees survived the first growing season.

"The Clip Mill site project demonstrates that saltcedar invasion can be controlled. With this in mind, we have formed a non-profit foundation, the Southwestern Riparian Restoration Foundation, to preserve and restore southwestern riparian habitats."

John A. Laccinole, principle cooperator and landowner in the Clip Mill project

Riparian habitat along the lower Colorado River was drastically altered during the last century by lower instream flows, reduction in flood flows, channelization, increased salinity and invasion by exotic plants such as saltcedar. Stands of native Goodding willow, Fremont cottonwood, and honey and screwbean mesquites had been nearly eliminated from this portion of the river. The loss of the native riparian community meant fewer wildlife, especially neotropical migratory birds.

Restored. *Native trees at the Clip Mill site a year after planting. FWS photo: Jackie Record.*

Reestablishing native riparian habitat along the river on the refuges and reducing the amount of saltcedar lowers the wildfire potential that threatens any remaining native vegetation within the refuges' boundaries. The multi-landowner Clip Mill project has achieved this goal, and provided improved habitat for migratory birds that depend on this dwindling riparian habitat on private lands.

The Clip Mill revegetation site consists of a 15-acre saltcedar thicket—three acres on private lands and 12 acres on refuge land. The Partners program and the private landowners funded the restoration on the private land, while the refuge funded the portion on refuge lands.

The revegetation effort was multi-faceted. First, the Service used heavy machinery to clear the area. The Service fire crews burned debris piles and established a fire break around the site to protect it from wildfires. Biologists then mapped soils and ground water depth to determine which native plant species were appropriate for each area of the site.

Project partners installed a drip irrigation system to pump water from the Colorado River to the site. Finally, they constructed a barbed wire fence to keep non-native burros from damaging the trees and irrigation system. In April, partners planted 6 acres of the Clip Mill site with 2,000 native trees, including 50 Fremont cottonwoods, 50 Goodding willows, 950 screwbean mesquites, and 950 honey mesquites.

This site may serve as an anchor point for future restoration work on the Colorado River refuges. The common stewardship goal between the refuges and the private landowners has built a strong partnership.

Marty Jakle, Ecological Services, Phoenix, Arizona

Success story: Deep Fork Ranch.
Located along Oklahoma's Deep Fork River, Robert Baker's ranch has been the site of a successful Partners project. Baker worked with the program to restore and protect nearly 400 acres of wetland habitat that had been degraded by agricultural practices and the encroachment of saltcedar, an invasive shrub. Baker's efforts have helped to eliminate the saltcedar and he has nearly met his goal of increasing the diversity, productivity and wildlife benefits of his land. This project is within the Lower Mississippi Valley Joint Venture Area and has been identified by the North American Waterfowl Management Plan as an area having critical migrating and wintering waterfowl, shorebird and wading bird habitat.

Region 3

Midwest Landowners Strive to Restore Wetlands

Wetlands. Prairie. Pine.

These features once dominated the states that make up Region 3, the Great Lakes-Big Rivers Region. Today, we find instead an agricultural machine that feeds a hungry nation and world. The States of Ohio, Indiana, Illinois, Missouri and Iowa have surrendered more than 85 percent of their original wetlands to tile drainage and ditches.

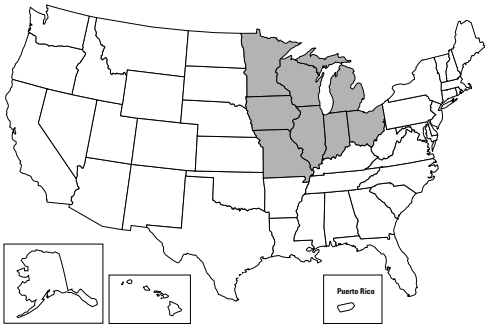
The steel of the plow has rendered the sea of tallgrass prairie a distant memory. The crosscut saw felled the great pineries of the upper Midwest in less than a century. The landscape in which we live and work today does not come close to reflecting that which existed 150 years ago.

And yet we are beginning to recapture some of the past.

The Partners for Fish and Wildlife program is at work restoring and rehabilitating the habitats of years gone by. In partnership with conservation groups, foundations, state and other federal agencies, the Partners program is working with private landowners all over the Midwest to voluntarily restore habitat for fish and wildlife resources on their properties.

"The 'Partners' program doesn't always receive the credit it should for the important assistance and funding it provides for private landowners," said Bill Hartwig, regional director of the Service's Great Lakes-Big Rivers Region. "It is, however, an innovative and unique program for restoring habitats that are critical to trust species, including migratory birds.

Region 3



"Once these important habitats are restored," he continued, "they are protected for no less than 10 years through agreements between the Service and the respective landowners. These agreements maintain and protect the restored habitats, provide maximum benefits for fish and wildlife, and guarantee the public tax dollars that have been invested into this cooperative program."

The following stories are only a snapshot of the accomplishments the Partners program has made in Region 3. Multiply a thousand times over these stories of success and you will begin to get a picture of the changes taking place on the landscape in this twenty-first century of the Great Lakes-Big Rivers Region.

Greg Brown, Regional Private Lands Coordinator, Ft. Snelling, Minnesota

Water where once there was no water. *Aerial views of a restored wetland in northwestern Minnesota. Top—before. Bottom—after. FWS photos.*

Cherished Book Inspires Wetland Restoration

Ken Brunswick, the Environmental Law Institute's National Wetlands Award winner for 2001, was looking for help to accomplish his dream of restoring some of the Limberlost wetlands made famous in the books of Indiana author Gene (Geneva) Stratton-Porter. Brunswick's enthusiasm for restoring the wetlands near his home was obvious, but no one could have known what a force for change one quiet farmer would become.

Brunswick has nearly single-handedly returned an intensively farmed landscape into what became in 1999 Indiana's first Wetland Demonstration Site. He has unquestionably been the catalyst for habitat restoration in the Limberlost/Loblolly watershed in east-central Indiana. The Bloomington Field Office has worked with Brunswick nearly from the beginning, when the Partners program helped him restore five wetlands on a tract that now forms part of a nearly 1,000 acre area of restored and protected wetland and upland in Jay and Adams counties.

Since then, Brunswick and Partners personnel have worked together to evaluate and survey numerous sites now under the Agriculture Department's Wetlands Reserve Program easement, owned by the Indiana State Museum and Historic Sites, or acquired by Friends of the Limberlost, the local land trust he helped establish. The Partners program has also funded the restoration of several additional wetlands and grasslands and worked with Brunswick on environmental education projects.

Most notably, using Service Challenge Cost-Share Funds, Brunswick and Partners biologists developed an outdoor laboratory near the historic Gene Stratton-Porter residence and have conducted four Integrated Environmental Curriculum workshops in the Limberlost. Brunswick's hard work and dedication, together with the Partners program and other conservation programs, have resulted in a truly unique historic site, combining the girlhood home of a famous Indiana author with the swamps and marshes she wrote about and loved.

Forest Clark, Ecological Services, Bloomington, Indiana

Farming the River Bottoms for Wildlife

Ideal partner. *Ray McCormick stands next to Half Moon Pond, one of the many wetlands on his White River bottoms farm near Vincennes, Indiana. FWS photo.*

Ray McCormick is the kind of farmer those who love wildlife would like to have in every county.

Farming more than 2,000 acres in southwest Indiana, McCormick was one of the first cooperators in the state's Partners for Fish and Wildlife program. Farming in the White River bottoms was never easy, with floodwaters often forcing replanting or delaying the harvest of crops. But the river bottoms held a special place in McCormick's heart, and he was determined to restore some of the wetland wildlife habitat removed years ago to make way for the plow.

Beginning in 1988, McCormick worked with the Partners program to restore some of the wetlands on his property by constructing low earthen levees and installing water control structures. He planted native grasses for waterfowl nesting cover, and tree seedlings and acorns to restore some of the historic bottomland forest habitat. When he was finished with his initial effort, McCormick had restored more than150 acres of wetlands, attracting a variety of wetland wildlife, including a pair of nesting bald eagles, a dozen species of shorebirds, and thousands of migrating and wintering waterfowl.

Since then, McCormick has enrolled more than 800 acres of his farm in various other conservation programs, including the Agriculture Department's Wetland Reserve Program and the Conservation Reserve Program, protecting many of those acres with permanent conservation easements.

In the process, McCormick has become an eloquent spokesman for wetland protection and restoration efforts nationwide. He has hosted numerous tours on his farm to showcase his conservation activities, which have been featured in several national videos by the Sierra Club, USDA, and ESPN Outdoors. He has testified before Congressional subcommittees on Farm Bill and wetlands policy, and is the recipient of numerous conservation awards, including the Service's Regional Wetland Conservation Award for the Private Sector in 1991.

Jeff Kiefer, Ecological Services, Bloomington, Indiana

East-central Minnesota.
Roger and Dawna Korf, landowners in Minnesota, worked with the Partners program to restore wetlands on their property. At left, a dozer at work at the beginning of the project on Site 1 in October, 2000. At right, just seven months later—and the site is full of water. An earthen damn holds water at the restored wetland in May, 2001. FWS photos.

Improved Road Crossings Add a New Dimension

The fish can breathe a little easier now in the Upper Black River and elsewhere in Michigan's northern lower peninsula. Fisheries biologist Heather Enterline, who works on Partners for Fish and Wildlife program projects at the Alpena Fishery Resources Office, has joined with local watershed groups to clean up the water and improve habitat for native brook trout, other fish and migratory birds.

"We are blessed with wonderful natural resources in this part of the state," Enterline said. "And, unlike more developed areas downstate, many of our problems are still relatively minor. By acting now, we can take small steps that will make a big difference for our natural resources."

Replacement of the Tin Shanty Bridge in Otsego County is one example of working together to make a difference. Flow of the Black River was obstructed by a road crossing of two undersized culverts. Shifting sands and siltation degraded water quality and covered brook trout spawning habitat. The culverts also impeded fish passage, especially upstream passage. Public safety became an issue each time the water rose above the culverts.

Twelve federal, state, and local agencies, conservation organizations, and businesses secured more than $120,000 in cash and in-kind services to replace the culverts with a new 28-foot steel span bridge.

"This bridge is a tremendous improvement," said Mike Roper, Otsego County road commissioner. "It shows how folks can join together to make things happen. We couldn't have done this alone."

Project funding came in part from the National Fish and Wildlife Foundation, matched with contributions of cash and services from area agencies and organizations.

"This type of partnership effort is right on target to help tackle resource problems," said Paul Rose of Trout Unlimited. "We've identified problems in the watershed, and joined forces to take action."

With more than 50 road and stream crossings in the Black River watershed alone, ample opportunity exists to do more cooperative work. The challenge for the partners will be to prioritize the many projects and then find the dollars to make things happen.

Jim Hudgins, Michigan Private Lands Office, East Lansing, Michigan

"The wetland project transformed a boring, lifeless parcel of land into a dynamic wildlife habitat. In just weeks, the restored wetlands attracted a number of game and non-game species. And it was a joy working with the U.S. Fish and Wildlife Service. They are extremely helpful and informative. The wetland restoration was the most painless part of my Conservation Reserve Program contract."

Minnesota landowner Greg Cipala

The Rebirth of a Prairie

The bottomlands of south-central Wisconsin's Crawfish River are typical of midwestern streams—tidy, uniform blocks of cropland surrounded by characteristic drainage ditches.

But in the heart of this 2,000-acre cropped floodplain lies a tiny 80-acre moist prairie remnant. The University of Wisconsin's Faville Grove Scientific Study Area is literally a biological Noah's Ark, full of rare plants such as yellow lady's slipper and the eastern prairie white-fringed orchid—one of only six populations of this endangered species in the state. The call of the upland sandpiper, bobolink and eastern meadowlark drift across the prairie.

How this rare remnant of the vast prairie managed to survive into the 21st century is itself a story. In the 1930s, recognizing the uniqueness of this rapidly disappearing ecosystem, Aldo Leopold established part of Faville Prairie as a research area for the University of Wisconsin. Many of Leopold's graduate students, including the Service's own Art Hawkins, worked on this prairie. Among their tasks, they documented the decline of southern Wisconsin's greater prairie-chicken population.

Today, another chapter in Faville Prairie's story is being written–this one focusing on rebirth and renewal. Players include the Partners program, the University of Wisconsin-Madison, Madison Audubon Society, the Wisconsin Department of Natural Resources, the Agriculture Department's Natural Resources Conservation Service, and a host of volunteers. Their collective vision sees Faville Grove Scientific Study Area as the nucleus from which restoration of hundreds of acres of surrounding farmland can emerge.

A first step toward realizing this vision occurred in 1998 when David and Francis Tillotson offered to sell their 60-acre farm adjacent to Faville Grove Prairie to the Madison Audubon Society. Madison Audubon's army of volunteers mobilized to harvest seed from more than 100 prairie plant species on the property and spent more than 600 hours collecting, sorting and cleaning enough seed to plant 25 acres of cropland.

But other work was still needed–about 2,000 feet of ditches had to be filled to restore the site's wetland hydrology. Thousands of black willows, honey locusts and box elders had to be cut and burned. More volunteers stepped forward to perform these tasks.

The Partners program teamed up with the Natural Resources Conservation Service to address ditch plugging and wetland restoration. Partners biologists surveyed, designed and supervised construction of this project component. Finally, on a bright November day all the pieces came together when 45 volunteers, buckets in hand, dispersed all of the seed that had been painstakingly collected throughout the year.

The results have been spectacular. Today, in the second year of growth, the restored prairie provides a dazzling display of prairie phlox, golden alexander and spiderwort while 100,000 silphiums and other slower-growing species sink their roots deep in the soil. Good news arrived this spring when an adjacent landowner offered to sell a 140-acre farm to Madison Audubon. Time to call back those volunteers as another piece of the original Faville Prairie comes back to life.

Art Kitchen, Wisconsin Private Lands Office, Madison, Wisconsin

"This type of partnership effort is right on target to help tackle resource problems. We've identified problems in the watershed, and joined forces to take action."

Paul Rose of Trout Unlimited

Rushing to Restore Wetlands

Restoring wetlands near Minnesota's Rush Lake has brought together a diverse group of partners including the Service, the Minnesota Department of Natural Resources, Mille Lacs Band of Ojibwa tribe and Muskies, Inc. The goal of all of these groups, along with the Rush Lake Improvement Association, is to improve and preserve the quality of 2,800-acre Rush Lake, which drains into the St. Croix—a designated wild and scenic river—and ultimately the Mississippi river.

In 1996, the Rush Lake Improvement Association, an affiliation of lakeshore and other private landowners, joined with the Partners program and the Minnesota Department of Natural Resources, contributing $20,000—which the Service matched—to restore wetlands within the watershed. To date, the Partners program has helped restore 30 wetlands totaling 100 acres on 10 private properties. These wetland restorations provide important fish and wildlife habitat, reduce sediment and nutrient runoff into Rush Lake, and contribute to flood control within the watershed.

In 2000 and 2001, partners used additional cost-share dollars to continue the wetland restoration efforts. Support for this and other conservation measures such as Forest Stewardship planning, easements, native grassland establishment and rough fish barrier installation have been accomplished with the help of all partners. None of these restoration and enhancement projects could have been completed without the cooperation of the private landowners involved.

The success of these partnerships has not gone unnoticed. The Rush Lake Improvement Association received a Minnesota Soil and Water Conservation District Cooperators of the Year Award for 1997–1998, and the Service's National Wetland Conservation Award for outstanding accomplishments for a group in 1998.

Through these partnerships, habitat restoration activities are expected to result in numerous additional wetland and other natural resource restoration accomplishments well into the future.

Lance Kuester, Minnesota Private Lands Office, St. Cloud, Minnesota

Service, Agriculture Dept. Often Work Closely

Through a unique partnership arrangement, the Partners for Fish and Wildlife program has teamed with the Minnesota Waterfowl Association and the U.S. Department of Agriculture's Natural Resources Conservation Service and Farm Service Agency to provide financial and technical assistance to landowners participating in USDA's Conservation Reserve Program. As enrollment in the CRP becomes increasingly competitive, landowners need to consider not only the physical characteristics of a land parcel offered for enrollment, but also the type of ground cover planted and habitat restored on the parcel when it's taken out of production.

This current Conservation Reserve Program effort requires participating landowners to restore wetlands and to establish adjacent grass cover on enrolled parcels for a 15-year contract period. However, such restorations can be more expensive and complex than other conservation practices.

Funds from the Minnesota Waterfowl Association, when combined with USDA cost-share and incentive payments, can entirely offset the wetland restoration costs. The technical assistance for project feasibility determinations, design, and construction oversight is provided by the Partners program. This combination has made this CRP effort extremely popular with area landowners.

Based on landowner interest and the number of accepted offers, the Service estimates more than 3,000 wetlands totaling more than 20,000 acres will be restored over the next two years in northwestern Minnesota. Significant progress has already been made. During the early 2001 field season, 50 wetlands totaling 150 acres have already been restored, and hundreds more sites have been surveyed and designed for construction. The broad scope of these restoration projects will yield fish and wildlife benefits in northwestern Minnesota for decades to come.

Lance Kuester, Minnesota Private Lands Office, St. Cloud, Minnesota

Region 4

Busting Stereotypes: Partners Program Thrives in the Southeast

The Partners for Fish and Wildlife program in the Southeast region proves that despite rumors to the contrary, land stewardship is alive and well. This non-regulatory and voluntary private lands initiative is directed to restore, improve, enhance, and protect fish and wildlife habitat through partnerships with private landowners and other partners, including Native American tribes. In fact, the majority of important fish and wildlife resources in the Southeast occur on private lands.

Since 1987, the Partners program in the Southeast has worked with over 1,000 private landowners and many other partners in restoring the native vegetation and hydrology to drained and degraded wetlands throughout the region.

Restoring an Ecosystem

Priority has been given to rare and declining habitat types in the region. This status is not only a biological flag but holds vast cultural significance. For example, many landowners and outdoor enthusiasts support the reestablishment of once widespread longleaf pine forests throughout the coastal plains of the Carolinas, Alabama, Georgia, Florida, Louisiana and Mississippi. The longleaf pine ecosystem that once covered approximately 90 million acres has been reduced to a mere 3 million acres or less.

The 97 percent decline in longleaf pine makes this ecosystem one of the most critically endangered in the Southeast and has affected keystone species such as the gopher tortoise and eastern indigo snake. Through the Partners program, biologists and landowners have planted nearly 3,000 acres of longleaf pine. These stands of timber have been the inspiration of many generations who have experienced the chilling whispers of the windswept tree tops and the beauty of these forests.

"To me, it's help"

With the historic loss of more than 51 percent of the region's wetlands, the protection, restoration, and conservation of our remaining wetlands are critical to the survival of many native waterfowl and migratory bird species such as the wood duck and sandhill crane, and aquatic species such as the extremely rare barrens top minnow.

Of the 135,000 acres of wetlands restoration projects that have been carried out through the Southeast Partners program since its inception, 70 of them belong to Bud Clayborne, a satisfied partner in Coffee County, Tennessee, who said, "It's pretty much a win-win situation for both of us. To me, it's help."

Bringing Back Bison?

The native prairies that once occurred throughout the Southeast are now mostly gone. However, opportunities to restore these native prairies and grasslands are available with private landowners. For example, scientists estimated that in pre-settlement times there were 2.5 million acres of prairie in Louisiana. We're now left with only a few hundred acres. These areas contained much of the forage that was needed for the wild buffalo and prairie chickens that supplied both the Native American tribes and the early settlers with clothing and food.

One of the long term goals of the region is to restore and protect 20,000 to 50,000 acres of the endangered "Cajun" prairie in southwest Louisiana, with the possibility of reintroducing the bison and the prairie chicken.

Fighting Exotics

Along with the many individual projects in effect, the region has also taken aggressive action against exotic, invasive plant species such as the Brazilian pepper and hydrilla that degrade the habitats of native fish and wildlife. Between 35 and 46 percent of endangered species are listed partly or entirely because of the effects of invasive

Buck Creek, Kentucky site prior to restoration. FWS photo.

Buck Creek after bank stabilization this Spring. FWS photo.

species. Biologists and partners use responsible and effective techniques such as prescribed burning and root removal of invasive plants to eliminate and control these unwanted invaders.

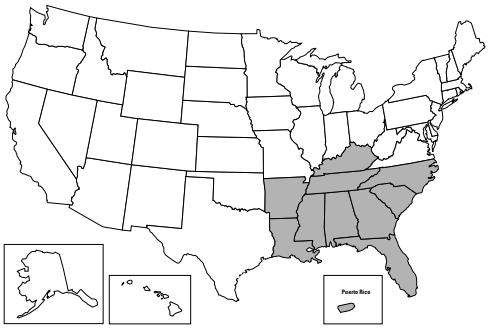
For example, the Sanibel-Captiva Conservation Foundation on Sanibel Island, Florida, has leveraged Partners program funding with other funding sources to restore more than 300 acres of wetlands through hydrology restoration and exotic plant removal. For their efforts, the region awarded them the 2000 National Wetlands Conservation Award to the private sector.

Overwhelming Success

Since the Partners program began in 1987, the overall success of the program and the number of private landowners involved have far exceeded expectations. Approximately 150,000 acres of habitat restoration have been completed in the region, and about 500 acres of native prairie have been restored. To date, the program has also finished more than 400 miles of streamside projects and boasts over 40 completed and ongoing invasive species eradication plans. Partners have completed more than 11,000 acres of various other habitat improvement undertakings benefitting trust species.

"It's pretty much a win-win situation for both of us." *Bud Clayborne agreed to exclude cattle and allow reintroduction of the extremely rare pinebarrens topminnow into this spring. FWS photo.*

Region 4



Over the past 5 years, private interest has increased the average number on the waiting list to over 100 landowners.

Gone Today, Here Tomorrow

At a recent meeting of the region's Partners program staff, biologists shared their success stories and ideas knowing that efforts today will benefit present as well as future generations. Such efforts are evident in the Daphne Middle School Project in Baldwin County, Alabama. Several acres of partially drained wetland were scheduled to be drained and filled during the construction of the new school in Daphne.

Continued on page 26

Do the right thing. *"We're willing to do what's right if people approach us right," said Partners participants Steve and Margaret Cunningham. FWS photo.*

Busting Stereotypes
(continued)

All together now. *Partners work together to install an osprey platform. FWS photo: Joe Cockrell.*

The Service, working through the Partners program, negotiated an agreement to restore the native habitat and develop the site into an outdoor educational classroom to be used by more than 1,500 students. The completed project is now home to wood ducks, monarch butterflies, and numerous species of migratory birds and other wildlife, serving as a model for other schools throughout the state.

The Buck Creek project in Kentucky is typical of many Partners projects that protect and restore riparian and aquatic habitats. The streams of Kentucky harbor more than 65 species of fish and mussels that are either listed or at risk. The greatest threats to these aquatic systems are habitat loss associated with stream alteration of riparian habitats and water quality degradation from non-point sources.

Endangered pitcher plants thrive. *Partners restored this mountain bog in North Carolina. Photo: FWS.*

Working closely with the private landowner, the Partners program biologist coordinated the planning and project development with the Natural Resources Conservation Service, the Kentucky Division of Water, the Kentucky Department of Fish and Wildlife Resources, and the U.S. Army Corp of Engineers that led to the stabilization of 450 feet of eroding stream bank. Trees and shrubs have been planted along the stream edge to help reestablish the riparian zone. These improvements have reduced the amount of sedimentation in the Buck Creek watershed, which benefits diverse habitat for mussels and many species of migratory birds.

Getting Personal

The positive public response to the work being carried out through the Partners program in the Southeast has been tremendous. As conservationist Aldo Leopold observed in his book *A Sand County Almanac*, "Conservation will ultimately boil down to rewarding the private landowner who conserves the public interest."

Also, the personal aspect of these partnerships is critical to success, as pointed out by private landowners Steve and Margaret Cunningham of Tennessee.

"We're willing to do what's right if people approach us right. It wasn't the program, it was the people we were working with," the Cunninghams said.

Ronnie Haynes, Partners Program, Atlanta, Georgia

Dymond Jones, External Affairs, Atlanta, Georgia

Region 5

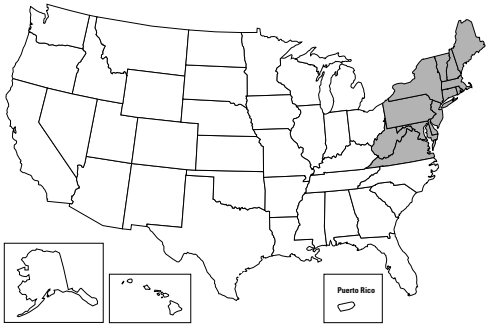
Buttermilk Falls Better Thanks to Partners

One of New Jersey's greatest assets is its rich diversity of fish and wildlife resources. As in many other places, substantial wildlife habitat in state has been lost to development. In the early 1990s, it looked as if Buttermilk Falls would be lost, too.

The 212-acre falls area in Morris County was slated for development. However, after clearing an access road through the forest and installing detention basins in preparation for a residential development, the builder went bankrupt.

In 1997, Mendham Township, in cooperation with Morris County Open Space Fund and the New Jersey Green Acres Program, purchased the property and designated it a natural area. However, the access road and detention basins remained. The road-clearing attracted brood parasites such as cowbirds and their avian predators to forest-interior bird nesting habitats. The township's environmental commission asked the Partners program to help restore the upland access road and create wetlands within the natural area.

Region 5



What makes Buttermilk Fall? *Falls upland after tree planting. FWS photo: Eric Schrading.*

The Service, in coordination with the township and the Natural Resources Conservation Service, and with the help of the Morris County Soil Conservation District and Somerset Hills Garden Club, prepared a plan to reforest 19 acres of uplands and create two wetlands near Buttermilk Falls.

"The Partners for Fish and Wildlife program provided Mendham Township with invaluable tools to restore the Buttermilk Falls Natural Area," said Sarah Dean Link of the township's environmental commission. "[Including] information, technical advice, engineering plans, assistance with permits, enthusiastic support and the funds to enable the Township Environmental Commission to carry out its goal of restoration of this beautiful property."

Volunteers and township staff planted more than 1,000 trees to reforest the former access road. An earthen berm and water-control structure capture water runoff from a nearby hillside for a one-acre freshwater wetland, and biologists created another wetland by plugging an existing detention basin structure. Native plants are recolonizing both wetlands.

According to Link, some tree seedlings are now 4 feet tall, on their way to restoring the contiguous forest fragmented by the builder's road. The two new wetland areas attract water birds and provide habitat for an abundance of amphibians. The restored meadows are attracting a variety of wildlife species. Because of the wildlife that returned to the area, Buttermilk Falls is also used by bird watchers, joggers and anglers.

"The U.S. Fish and Wildlife Service Partners for Fish and Wildlife program and Mendham Township have good reason to be proud of the results of this partnership," Link said.

In the 10 years since the Partners program debuted in New Jersey, it has helped more than 150 private landowners and other organizations restore 3,856 acres of wetlands, 339 acres of uplands and 11.3 miles of riparian buffers.

Eric Schrading, Ecological Services, Pleasantville, New Jersey

Farmlands Reap Benefits of Wetland and Grassland Restoration

Clyde Qualk credits native grasses for saving his livestock during summer droughts.

"The amount of forage that these grasses produced was unbelievable," the Pennsylvania farmer said. "The rest of my pastures were browned out and these had shoulder-high, green succulent grass. I had my doubts about the [Partners] program at first, but you really saved me this year."

Qualk, a cooperator in the Pike Run Watershed Project near Pittsburgh, is one of many landowners who have worked with the Partners program since it was established, to restore fish and wildlife habitats on private farmland in Pennsylvania.

In the Pittsburgh area, Partners program staff work with staff from the California University of Pennsylvania to develop grant proposals, restore wetlands and native grasslands, and develop educational programs.

With a grant from the R.K. Mellon Foundation, the Partners program is assembling five construction crews of university and Partners staff to build livestock fencing to protect streams and wetlands, restore native grasslands and implement wildlife-friendly best management practices. Landowners often offer advice and assistance to the construction crews, and they frequently show off the results of a wetland restoration or native grass planting to other interested friends and neighbors.

Seeing what's inside. *A volunteer checks a swallow box on a restored wetland. FWS photo: David Putnam.*

Since its inception in 1996, the Partners for Fish and Wildlife program in Pennsylvania has worked with private landowners to fence almost 100 miles of streambank, restore 2,286 acres of wetlands and restore 2,200 acres of native grasses. Currently, the program supports projects in 11 watersheds in 24 Pennsylvania counties.

David Putnam, Ecological Services, State College, Pennsylvania

Biologist is Happily Singin' the Blues

House of blues. *Wild blue lupine is habitat for the Karner blue buttefly. FWS photo: Dianna Ellis.*

Since 1974 Larry Gordon has been seeing blue—Karner blue butterflies that is. Back in the early 1970s, Gordon was working for the Saratoga (New York) County Planning Board. He started a land-clearing effort to reduce visual obstructions at the county airport. The following spring, Mr. Gordon noticed that wild blue lupine plants and tiny blue butterflies were beginning to appear in areas once dominated by 20-year-old pine and oak trees.

It happens that wild blue lupine is crucial to the survival of the Karner blue butterfly, which has been an endangered species since 1992. Gordon has the knack for growing wild blue lupine with a 90 percent success rate. Over the years, he has conducted experiments to see what works best for growing lupine.

The Karner blue butterfly has a wingspan of about 1 inch and lays its eggs twice a year on lupine. Lupine prefers pine barrens, areas that were traditionally maintained by wildfire. Wildfire suppression and development have contributed to loss of the lupine habitat crucial to Karner blue survival.

"Like a Big Play Pen"

Hoping to restore more habitat for the Karner blue butterfly, Gordon developed a partnership with the Partners program to restore Karner blue habitat at the Boy Scouts' Camp Saratoga where he had worked.

Gordon coordinated with a vocational school in this county to cut down the sapling white pine and oak trees that dominated the area. The students received invaluable field experience in forestry practices and timber harvesting while clearing the site.

He then worked with Mt. McGregor Correctional Facility and used free inmate labor to clear timber slash from the harvest site. The financial assistance provided by the Partners program enabled Gordon, who has heavy equipment experience, to rent a bulldozer to clear stumps and remove other unwanted vegetation.

When the 13-acre site was cleared down to the bare sandy soil, Gordon coordinated with both Cub Scouts and Boy Scouts to seed the site with wild blue lupine seeds and sets. He designed an Environmental Habitats badge depicting wild blue lupine and Karner blue butterflies to reward the scouts for their efforts.

With such success at propagating wild blue lupine, Larry Gordon still has the blues, the Karner blues. The butterfly's habitat and population have increased thanks to his efforts. He resolved not to quit after the first attempt but to try different techniques. As Gordon says, "You don't need a big budget, just an old man and a few kids who are willing to make a difference." Larry Gordon would also agree—perseverance is the key.

Dianna M. Ellis, Ecological Services, Cortland, New York

Wild place. *Visitors to Russ Pringle's property are greeted by geese and other birds. FWS photo.*

Trading in his business suit for a pair of blue jeans, a work shirt and a baseball cap, Russ Pringle now has the time to enjoy doing what he has always wanted to do—creating a haven for wildlife.

When Pringle, a native of western Pennsylvania, first came to central New York, he fell in love with the area. The former owner of several auto parts stores said that "what I love about upstate New York is the variety of wildlife—you don't know what you'll see next."

In 1998, Pringle became a partner with the Partners program hoping to restore 238 acres near Syracuse to make it a special place for wildlife.

Biologists helped Pringle restore five potholes on his land–but then the bug bit him and soon he was restoring grasslands as well. Along with maintaining more than 100 acres of cool- season grasses, he restored 60 acres to native warm-season grasses under the Department of Agriculture's Wildlife Habitat Incentives Program. Pringle has restored additional wetlands on his property so that a total of 11 restored potholes are surrounded by native grasslands.

"What makes Russ such a great landowner to work with is that he has invested much of his own time and money to restore the property," said Carl Schwartz of the New York Field Office. "That is a true partnership—where everyone is contributing something to the project."

Visitors to Russ Pringle's property overlooking beautiful Skaneateles Lake are greeted by geese, mallards, wood ducks, deer, turkey, ruffed grouse, killdeer, a pair of marsh hawks and bobolinks singing their bubbly song overhead.

"This is like a big playpen for me, it's something I feel good about doing," Pringle said on a recent tour, grinning from ear to ear.

Dianna M. Ellis, Ecological Services, Cortland, New York

Stream Teams Adopt Watershed

Celebrating together. *Partners plant trees during the White River Partnership Celebration. FWS photo: Eric Derleth*

Teamwork is key to turning the tide in Vermont, where residents concerned about the health of the White River watershed have formed "stream teams" to adopt 150 to 200 miles of stream or river frontage.

The stream teams are part of the White River Partnership and the Partners program, which has completed more than 20 restoration projects throughout the watershed—ranging from total channel reconstruction of a one-mile stretch of the river to small livestock exclusion fences and riparian revegetation.

Riparian and in-stream habitat along many miles of the White River has been degraded by years of land clearing, in-stream gravel mining, floodplain encroachment and river channelization for agriculture and flood control. The 710-square-mile White River watershed drains east into the Connecticut River watershed and is important for Atlantic salmon restoration.

The volunteer stream teams encourage local government involvement in the river projects, and three teams have secured funding to support habitat restoration and water quality monitoring in seven towns. The teams host stream cleanup and tree planting, and they coordinate volunteers who monitor water quality.

A technical team, including representatives from the Service, the state, the Forest Service, the Natural Resources Conservation Service and Trout Unlimited, assists the partnership in evaluating restoration projects and developing and analyzing stream data.

The White River Partnership was selected as one of 12 national showcase watersheds in 1999 and received a U.S. Forest Service grant last year for watershed restoration projects.

Eric Derleth, Fisheries,
Essex Junction, Vermont

Atlantic salmon benefit from Partners. *Partners has completed over 20 projects on the White River watershed. Photo: FWS.*

Region 6

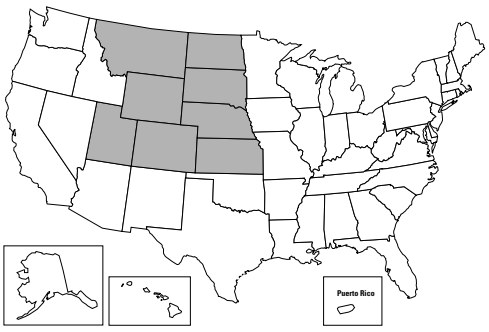
Adopt-a-Trout: It's Not Just About Fish

Adopt-A-Trout is an innovative project that links fisheries migration data collected by biologists to teachers and students in the Blackfoot Watershed through Web sites and field trips. This project offers students hands-on opportunities to work with resource professionals, giving them real life exposure to scientific research being conducted in the Blackfoot River Watershed of Montana.

Through the Adopt-A-Trout project, biologists, teachers and students capture trout and surgically implant small radio-transmitters to monitor their movements up the Blackfoot River and its tributaries. The students track and monitor the tagged fish three to seven times each week through field visits and document their journeys weekly on the Web. Students have created a site for each tagged fish, replete with maps, photographs and other information.

Since 1994, biologists with the Partners program in Montana, along with Montana Fish, Wildlife and Parks staff, have been using radio telemetry to track native migratory bull trout and westslope cutthroat trout in the Blackfoot River Watershed. Radio telemetry and other research studies help biologists identify key spawning and rearing tributaries, as well as habitat types used by fish, and how human activities have affected those habitats.

Region 6



Where in the world… *With a little help, a Service fishery biologist locates "Wandering Wanda" in Deer Creek. Wanda is a westslope cutthroat trout adopted by this Potomac Elementary School class through the Adopt-a-Trout program. FWS photo.*

The Partners program uses this information to prioritize tributaries in need of restoration work, as well as to monitor the success of its restoration projects.

Students from all six schools within the watershed "adopt" one or two trout to which they give names such as Wandering Wanda and Redneck June. One hundred and sixty students from the six schools participated in spring field trips to the Blackfoot River and a fish spawning site in one of the river's tributaries. A teacher's Web site has been designed as part of this project to help integrate Adopt-A-Trout into the teachers' daily curricula.

While 2001 was the first year of the Adopt-A-Trout Program, efforts already appear to be paying off.

"I think it's a great opportunity for students to learn to understand their environment, and how to take care of what we've got," said teacher Linda Hugulet. "I also think it will teach them to be better stewards of the land."

Adopted. *A radio-collared westslope cutthroat trout. FWS photo.*

The project has won praise from the students, as well.

"I'm going to do this when I grow up," Ethan Hall, a third-grader, said as he watched biologists netting trout. "I decided this just now."

Greg Neudecker, Benton Lake NWR, Great Falls, Montana

Check Your Ego at the Door

Majestic. *Tall Gay feather, one of the species that has returned to the Kansas prairie thanks to the work of the Tallgrass Legacy Alliance. FWS photo: Jim Minnerath.*

It's not tall. *A Kansas field prior to restoration work by the Tallgrass Legacy Alliance. FWS photo.*

Only 4 percent of North America's pre-settlement tallgrass prairie survives today. Kansas contains about 80 percent of the remaining acreage.

To preserve that remaining majestic prairie, the Tallgrass Legacy Alliance was created in 1999, partly the result of a suggestion by Region 6 Partners for Fish and Wildlife coordinator Rick Dornfeld to "think big, think ecosystems."

These words of encouragement came at a time when the Partners program in Kansas was just finishing a needs assessment of the state's various habitats, done primarily through The Nature Conservancy, the Kansas Biological Survey and the Kansas Field Office. The assessment showed clearly that of all the resource issues and environmental needs facing Kansas, one stood boldly forward: tallgrass prairie.

Tallgrass prairie is most known for its biological diversity, its economic potential and its role in a way of life dating back to cattle drives up from Texas, muddy boots, tired horses, campfires, guitars and a night sky that no other land can rival. Threats to tallgrass prairie include invasive species, prairie fragmentation, lack of landowner incentives to manage prairies sustainably, decline in agricultural profitability, loss of native plant and animal diversity, and loss of acreage from other development.

It became obvious to Dornfeld and all of those involved in conservation in Kansas that something needed to be done. This something turned out to be the Tallgrass Legacy Alliance. With the help of former Governor Mike Hayden, the Partners program initiated this alliance. Yet credit for the success of the initiative should be given to the ranching families who have so willingly allowed the Partners program into their homes and their lives. A level of trust that could surely be called friendship is what drives the alliance.

Remarkably, agencies, individuals and organizations such as Kansas Livestock Association, Kansas Farm Bureau, The Nature Conservancy, Kansas Department of Wildlife and Parks, the Wildlife Management Institute and others all agree that when they walk in the door to a Tallgrass Legacy Alliance meeting, hats, egos and titles are left at the door. All opinions are treated equally and the group agreed to work positively on problems that appear solvable.

The project's goals—some of which are already being achieved—include:

- Preventing further loss of the tallgrass prairie;
- Facilitating public awareness of the benefits provided by tallgrass prairie, such as watershed protection, economic value to the ranch industry, carbon sequestration, cultural and historical value, and habitat to numerous species of threatened plant and animal species;
- Developing a tallgrass conservation easement program;
- Developing specific Farm Bill policies for tallgrass prairie; and
- Achieving national recognition as a producer-driven, landscape-scale initiative, designed for private landowners to voluntarily manage the remaining Kansas tallgrass prairie to support the ranching culture in an ecologically sound manner, precluding further listing of tallgrass species under the Endangered Species Act.

Jim Minnerath, Flint Hills NWR, Hartford, Kansas

The Comanche Pool Partnership Brings Diverse Interests Together

Over the past 2 years the Partners program has been involved with state and federal agencies in both Kansas and Oklahoma which have a common goal of improving and protecting vanishing prairie resources. What makes this partnership different is that it centers around a local, landowner-driven, non-profit resource foundation called the Comanche Pool Prairie Resources Foundation, known locally as the Comanche Pool.

The Comanche Pool was founded by a group of landowners in the mixed-grass and sand-sage prairies encompassing approximately 5.4 million acres in south-central Kansas and north- central Oklahoma. This area includes two Service regions, two Natural Resources Conservation Service regions, two state wildlife agencies and numerous local conservation districts.

The Comanche Pool is dedicated to regenerating and protecting natural resources; educating ranchers, local citizens, and youth on the proper management of the rangeland ecosystem; and enhancing the socioeconomic well-being of the rural community. The origins of the Comanche Pool go back to 1998, when the Service's Oklahoma Field Office and the Western Governors Association, along with the Oklahoma Department of Wildlife and the NRCS, hosted "Ranch Conversations" in western Oklahoma. These meetings generated landowner input and interest in the new direction the Service was taking toward candidate species conservation.

This led to the development of the High Plains Partnership, an effort geared toward the conservation of species at risk in portions of Oklahoma, Texas, New Mexico, Colorado and Kansas. Several Comanche Pool board members attended the initial meeting and expressed an interest in being involved in this new program.

In 1999, the Service developed a proposal and secured funding from the agency's Endangered Species Landowner Incentives Program for the various state field offices in the Comanche Pool area. In Kansas, where 98 percent of the land is privately owned, the Partners program became the best mechanism for getting habitat projects completed.

Restored Arkansas darter habitat. *In Kansas, where 98 percent of the land is privately owned, the Partners program became the best mechanism for getting habitat projects completed. FWS photo: Greg Krauds.*

Since then the Comanche Pool has assisted the Service in securing $279,000 for on-the- ground projects. This funding has led to habitat improvement on some 30,000 acres with an additional 33,100 acres of habitat work targeted for this year.

Projects are geared toward habitat restoration and protection for the lesser prairie- chicken, black-tailed prairie dog, ferruginous hawk, burrowing owl, plains minnow, red spotted toad, and Arkansas darter. However, the overall emphasis of the partnership is on good rangeland management. Some of the habitat improvement practices include grazing management plans, fencing, water development, control of woody invasives and native plant restoration.

For the birds. *The overall emphasis of the Comanche Pool partnership is on good rangeland management for species such as the lesser-prairie chicken. FWS photo: Greg Krauds.*

The Comanche Pool also received a $50,000 grant from the National Fish and Wildlife Foundation for additional habitat restoration projects and has worked diligently to secure a range specialist position, jointly funded by the Kansas Department of Wildlife and Parks, NRCS, the Service and the Comanche Pool. This position will act as a point of contact for the Service and provide technical assistance to landowners looking to improve their rangeland habitat in both Kansas and Oklahoma.

Jim Minnerath, Flint Hills NWR, Hartford, Kansas

Cows Come Home for Conservation Biology

Cooperation. *Partners staff Karl Flemming (left) and Patrick Henry discuss projects with South Dakota landowners LeRoy Hodge (far left) and Randy Spreckles. FWS photo.*

To stem the tide of grassland loss in South Dakota, the Partners program and many of the state's ranchers have joined forces on a wide variety of habitat restoration projects. Some might consider this a strange alliance. However, a closer look reveals that when it comes to grassland conservation, the goals of ranchers and the Partners program are mutual—and the path to success is clear.

By working together to save South Dakota's remaining grasslands from tillage, livestock ranchers and wildlife conservation both benefit. Conversely, if the prairie is converted to cropland the pattern is equally clear; the rancher goes, the grass goes and along with it the prairie wildlife.

Partners staff work with more than 200 landowners a year in South Dakota, many of whom are ranchers who wish to either maintain, enhance or restore grasslands through managed grazing systems, grass seedings or wetland development. Terry Howard, a South Dakota rancher and Partners participant, typifies the feelings of many. He notes that the Partners program is "super to work with" and helped him restore 320 acres of grazing land that "should have never been farmed."

Keith Krull, another South Dakota rancher who worked with the Partners program, notes that Partners staff were very accommodating and helped him "cut through the red tape" to meet the needs of his operation.

Similar sentiments have been heard nationally. Myra Hyde, director of environmental issues for the National Cattlemen's Beef Association, said that ranchers who work with the Partners program report a "positive experience" largely because the program is "voluntary, flexible and delivered one-on-one to address site specific needs."

As tillage agriculture continues to expand, any effort to save the grassland character of South Dakota will need to include meaningful partnerships with ranchers—only then will future generations still be able to enjoy the sounds of the prairie.

Kurt Forman, Brookings Wildlife Habitat Office, Brookings, South Dakota

Focusing on an Age-Old Wetland

The San Luis Valley in south-central Colorado—an ancient lake bed some 100 miles long and 50 miles wide—is a critical area for wetland restoration and migratory waterbirds. Numerous large wetland complexes occur throughout the valley, supporting large concentrations of resident and migratory water birds.

The Rio Grande flows through the valley and numerous small streams from surrounding mountains feed an immense aquifer. Agriculture, greasewood flats, wetlands and riparian communities dominate the landscape.

Against this backdrop, the Alamosa/Monte Vista National Wildlife Refuge complex provides key wetland components within the valley. The Nature Conservancy, Colorado Division of Wildlife and Ducks Unlimited also have large ongoing wetland protection efforts and the Partners for Fish and Wildlife program supports those efforts.

Development of resources including water, real estate, and agriculture are the primary threats to fish and wildlife resources in the San Luis Valley.

The Partners program in Colorado was first designed to help alleviate avian cholera problems at Monte Vista NWR. By creating waterfowl wintering sites away from the refuge, biologists managed the area for reduced waterfowl concentrations and significantly reduced cholera mortalities. Since then, wetland restoration for nesting and migrating waterbirds has been the primary focus, and more than 10,000 wetland acres have been restored.

The Partners program has been focusing on wet meadow and riparian restorations. Wetland projects are designed to provide wet meadow habitat for foraging and nesting waterbirds. These projects are often associated with resting of upland grasslands for nesting cover. Riparian habitat projects focus on restoration of native vegetation through fencing, re-vegetation, and grazing management. These riparian projects will benefit the endangered Southwestern willow flycatcher as well many other riparian-dependent species.

Bill Noonan, Partners Program, Lakewood, Colorado

Making Stone Soup

Combined effort. *Contributors to a South Dakota Partners restoration got their names and logos on special equipment purchased for the project. FWS photo.*

Many of us remember the children's story of stone soup, in which Napoleon's soldiers showed the French villagers how they could make soup when everyone shared a little bit. The lesson I learned from this story was how to get people to share.

First you need a goal, and then someone needs to divide the parts into bite-sized pieces for all of the participants. That's the technique the Partners program used to buy 44 specialized grass seeding and no-till drills in South Dakota at a cost of about $1 million.

The goal was to plant native grass and encourage farmers to use no-till methods in their grain production to preserve those native species. Both require specialized drills which most farmers don't have.

The Partners program joined South Dakota's conservation districts, the South Dakota Department of Game, Fish and Parks, Ducks Unlimited, and local groups and businesses to buy drills that cost about $22,000 each. The conservation districts agreed to pay for half the cost of the drills, and then own them and operate them, charging farmers a per-acre rental fee to use the drills.

The Partners program, South Dakota Game, Fish and Parks, and Ducks Unlimited shared the other half of the purchase price. Like a race car on the NASCAR circuit, the drills carried the logo of every group that contributed to the project. Every farmer using one of these drills can't help but see the partners who made it possible.

There is now a network of these specialized drills available to farmers all across South Dakota to restore native grasslands or get acquainted with no-till farming. Since we started the program in 1997, 2,900 farmers have planted 153,000 acres of grass and 10,000 acres of no-till crops.

There is no way that any of the partners in this project could have done this alone. When we all agreed to make this pot of soup, each of us put in a little bit of our treasure and the plan came together. I can't help but stand back now and smile when I see the machines rolling up acre after acre. I feel a little like the French soldier in the story, about to enjoy a bowl of the soup that the villagers made together, accomplishing something none of them could have done separately.

Carl Madsen, Brookings Wildlife Habitat Office, Brookings, South Dakota

Preserving the Last Best Place In Montana

For many, Montana conjures up images of clear streams, snow-capped peaks and uncluttered vistas. Unfortunately, unrestricted development has disastrous affects on fish and wildlife, and rural lifestyles are disappearing as working ranches are swallowed-up by an onslaught of "ranchettes."

On a brighter note, intact landscapes still exist. One such place is southwestern Montana's 385,000-acre Centennial Valley. The Centennial and Gravelly mountains tower over the valley floor and smack dab in the middle lies Red Rock Lakes National Wildlife Refuge. Other public land management agencies control 240,000 acres, and 15 families own the remaining 100,000 acres of private land.

The Partners program is leading an effort with two powerful tools—habitat restoration and conservation easements. Short-term agreements are used to restore stream and riparian habitat for arctic grayling and west slope cutthroat trout. Key partners include Montana Fish, Wildlife and Parks and the Arctic Grayling Recovery Program.

The Partners program also assists ranchers with grazing management and livestock off-site water facilities. These projects relieve grazing pressure on riparian areas and improve water quality. With the help of the Partners program, private landowners have restored more than 15 miles of critical stream habitat in the valley.

Private lands are permanently protected with conservation easements. Easements keep land in private ownership while allowing traditional agricultural uses such as grazing and haying. Subdivision, wetland drainage and sodbusting are prohibited.

In the end, everyone benefits. Private landowners continue to ranch. Red Rock Lakes NWR is buffered and enhanced. The valley's importance as a migration corridor is preserved and diverse habitats are restored. And, finally, a unique last best place in Montana remains as it has for thousands of years.

Jim Stutzman, State Coordinator, Great Falls, Montana

Randy Gazda, FWS Biologist, Great Falls, Montana

Satisfied Customer: Ray Heupel, Medina, North Dakota

Legacy for a grandchild. *Landowner and Partner participant Ray Heupel shows off his restored North Dakota wetlands. FWS photo.*

"Our farm has been in the family for 90 years… We're pretty proud we're still on the farm. My mother once said that there were times when if it weren't for the wildlife, they would have starved to death. So we thought we could do something to help wildlife now."

Ray Heupel has helped wildlife in a big way on his farm, located in the heart of the Chase Lake Prairie Project Area, a flagship project of the North American Waterfowl Management Plan. Together with the Partners program, the North Dakota Game and Fish Department, and Ducks Unlimited, Heupel and his family have created, enhanced and restored more than 400 acres of wildlife habitat on their farm, and have installed several waterfowl nesting structures.

The best example of Heupel's interest in wildlife—and how a successful partnership between a farmer and wildlife organizations can exist—is within view of his modest farmhouse. Broods of young ducks, hatched from nesting structures, swim contentedly in a 27-acre wetland that Heupel and the three wildlife organizations restored in 1991. Once a field for raising wheat and sunflowers, the semipermanent wetland now holds water for ducks and other wildlife nearly every year.

A Partners biologist representing the Chase Lake Prairie Project initially approached Heupel. After some conversation and a cup of coffee at the kitchen table, Heupel was hooked on the idea of restoring a wetland.

"I've got a grandson, and I think it's important that we leave him with a wildlife legacy," he mused on a recent tour of the project.

With a 15-year agreement in hand, Partners staff approached Ducks Unlimited at their Great Plains Office in Bismarck. DU was more than happy to design and construct the dam and water control structure needed to properly manage a wetland of this size, and provided $7,387 to complete the project.

To protect the wetland the North Dakota Game and Fish Department, through its Private Lands Initiative, put up the $3,103 needed to reseed 15 acres of cropland surrounding the wetland back to grass. The grass buffer not only protects the wetland from sedimentation, it provides important nesting escape cover for a variety of wildlife. The Partners program continues to work closely with Heupel in managing wildlife on the tract, which in most years once produced over 30 bushels of wheat per acre.

Heupel's 27-acre restored wetland, surrounded by 15 acres of grass, stands as a testament to how wildlife organizations can work together to maintain wildlife habitat and productive agriculture.

Kevin Willis, Private Lands Coordinator, Bismarck, North Dakota

Tribal Lands Key Component in Partners Program

While the Partners program is often referred to as a "private lands" initiative, the program has also been instrumental in restoring habitat on Indian reservations, working closely with Tribal governments to preserve, enhance and create thousands of acres of wetlands. Two projects from Region 6 exemplify the success of the Partners program in working with Native American tribes.

Ft. Peck Reservation

The Service has been working on habitat restoration projects on the Ft. Peck Reservation since 1996. The Water Resources Division of Ft. Peck Tribes, Range Resources Office of the Bureau of Indian Affairs and individual tribal members have been the principal partners.

A cooperative agreement between the Service and the Ft. Peck Tribes enabled them to hire a tribal member as a wildlife technician who was instrumental in obtaining a North American Wetland Conservation Act grant for the reservation. In addition to the grant, the Partners program has provided funding and technical assistance since 1996 for this habitat restoration.

The primary objectives of the work on Ft. Peck were to restore wetlands, improve grazing management and protect significant spiritual and cultural sites. Accomplishments include:

- 250 wetland acres restored (prairie potholes and riparian wetlands);
- 25 miles of stream habitat enhanced; and
- 27,500 native prairie acres enhanced with a grazing management system.

The Service sees tremendous potential for additional habitat work on Ft. Peck Reservation. The reservation contains large, intact blocks of native prairie and wetland complexes. These areas could be enhanced with grazing systems, wetland restoration and riparian management.

Satisfied Customer No. 2: Warren Adams, Wilton, North Dakota

Confederated Salish and Kootenai—Flathead Indian Reservation
The Partners program began working in the Flathead Indian Reservation in 1990. Initially, the work focused on wetland restoration but it soon expanded into streams, riparian areas and uplands that provide critical habitat for native fish, migratory birds and threatened and endangered species.

Grizzly bears are very dependent on riparian areas for travel corridors between important spring feeding grounds. Habitat fragmentation is a growing threat in this part of Montana, and tribal officials and the Service are concerned about land subdivision, road construction and invasive species.

Habitat restoration projects on tribal, tribal trust and individual tribal member owned land include the following accomplishments:

- 225 wetland acres restored
- 10 miles of in-stream and riparian habitat restored
- 11,900 acres of upland habitat enhanced with grazing systems and alternative water
- 1 conservation easement perpetually protecting 20 wetland acres
- 3 fish passage barriers removed enhancing fish movement on 18 stream miles

The Partners program also hopes to take advantage of new habitat restoration opportunities on the Flathead Indian Reservation. The Jocko River provides critical habitat for native fish such as west slope cutthroat and bull trout. The Partners program will continue to work with the Salish-Kootenai Tribe to restore fishery habitat within the Jocko River Watershed.

Healthy habitat. *North Dakotan Warren Adams was one of the first farmers to join the North Dakota Partners program. He restored a slough that had been drained in the 1930s. FWS photo.*

"My dad drained that slough back in the late 1930's. This was all pasture back then. But after it was drained, the cattle wouldn't use it much, and when they did, they'd be getting stuck in the muck half the time. We tried farming it several times, but then the summer rains would come and destroy the crop most of the time. Now that it's restored, I see lots of wildlife on my daily walks down to it. I guess it was always meant to be a wetland."

What makes Warren Adams' North Dakota wetland restoration a phenomenal success story is the fact that this slough will never again be drained. That's because in 1997, Adams sold a perpetual wetland easement to the Service for this and other, smaller wetlands on his property.

Back in 1989, Adams was one of the first farmers to establish a partnership with the fledgling Partners program. A Service biologist approached Warren about restoring the drained slough, which is easily seen from the four-lane state highway connecting Bismarck and Minot. Adams had just entered the drained slough and surrounding 200 acres into a U.S. Agriculture Department 10-year Conservation Reserve Program contract. Partners staff convinced Adams to restore the slough because the resulting water would count as cover and he wouldn't have to seed the slough to grass under the CRP contract.

Working together, Ducks Unlimited, the Partners program, and Adams restored a 44.3- acre semipermanent prairie wetland for less than $15 per acre. Adams did the dirtwork himself to restore the 44.3-acre wetland, filling 200 feet of open ditch using his own equipment. He was paid $200 by Ducks Unlimited, Inc. and $443 by the Fish and Wildlife Service to complete the restoration project.

Because of one of the most extreme droughts recorded in the prairies, Adams' wetland didn't fill with water until the dry spell broke 5 years later in 1993. In its first year with water, the wetland was covered with smartweed, bulrush and ducks…plenty of ducks. It has been a favorite nesting area for migrating ducks, geese and swans ever since. Perhaps these critters realize, as Adams noted, "it was always meant to be a wetland."

Kevin Willis, Private Lands Coordinator, Bismarck, North Dakota

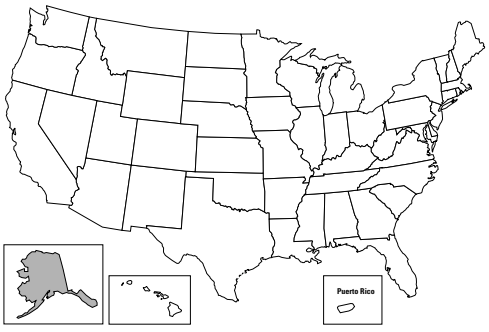
Opening the Way, One Culvert at a Time

Duck Creek runs through the center of the Mendenhall Valley watershed and ultimately drains into the Mendenhall Wetlands and Fritz Cove area near Juneau, Alaska. This valley and its waterways have played important roles in the history of Alaska's capital, from providing land for early agricultural development to serving up the first gold to be discovered in the region. But the development that has come with Juneau's growth hasn't been kind to Duck Creek.

In the minds of many people living in the Lower 48, Alaska is an untouched, pristine wilderness. This image ignores the fact that the state has endured a busy century of development and much of its impact has been concentrated upon relatively small centers of human settlement—including Juneau.

At one time, Duck Creek supported a thriving fishery. Chum salmon runs approached 10,000 fish a year, enough to provide an important subsistence food source for local Tlingit people and support the Mendenhall Valley's fur-farm industry. Coho salmon also returned in significant numbers to spawn.

Region7



One step at a time. *Much remains to be done to restore Duck Creek, but thanks to the partners who pulled together to remove culverts, 100 feet of stream bank was restored. In addition, nearly 3 miles of historic creek can now flow freely again, creating improved habitat for juvenile coho salmon and cutthroat trout. FWS photo.*

As recently as the late 1960s, runs of 500 Duck Creek cohos were recorded. Trout, thriving upon the eggs and carcasses of spawning salmon, provided another valuable resource and a popular sport fishery.

Today, Duck Creek, surrounded by residential areas, is in trouble. As a result of a combination of development-related factors, the stream's chum salmon are now extinct, fewer than 20 cohos find their way back to spawn each year and trout fishing has been closed. Using salmon as barometers of stream health, it is clear that Duck Creek is very ill indeed.

Improperly-sized and installed road culverts are among the more obvious causes of the stream's malady. During high water periods, culverts are choked with debris. The blockages damage fish habitat in two ways: sediment cannot be easily flushed from the streambed, thus damaging spawning areas and water quality, and blocked culverts prevent fish from moving either upstream or down. The plugged culverts also result in upstream flooding during heavy rains.

It was this kind of recurring flooding problem that forced the Glacier View Condo Association to look for help. The Partners program, collaborating with the Mendenhall Watershed Partnership, the city and borough of Juneau, and Alaska Marine Lines, joined forces with the condo association to come up with a plan to restore this piece of Duck Creek.

The Partners program provided materials to stabilize the creek bank and build a foot bridge across the stream at the site of the culverts. The city volunteered time and equipment to remove the culverts and city dump trucks to haul away the culvert materials.

The condo association and the Mendenhall Watershed Partnership—drawing upon other volunteer help, including Mac's Design and Construction, Southeast Alaska Guidance Association, and local middle school students—worked together to construct the bridge, clean up around the creek prior to culvert removal, and stabilize stream banks while the project was underway. Alaska Marine Lines provided free storage of the bridge until the culverts were removed and the site prepared.

Most work was completed during periods of low flow, enabling workers and equipment to stay out of the stream and avoid any unnecessary disturbance of creek habitat. Once the culverts were removed, coir (plant fiber) logs were placed along each bank for erosion control. Rye grass and willow, covered with soil-stabilizing biodegradable coconut fiber mats, were planted along the river to secure the banks. Willow cuttings will be added this fall to further stabilize the shoreline.

Of course, much remains to be done to restore Duck Creek to the healthy and productive stream that it was not so long ago. But thanks to the partners who pulled together to remove the Glacier View Condo culverts, 100 feet of stream bank was restored. Better still, almost 3 miles of this historic creek can now flow freely again, protecting homes from flooding, creating improved habitat for juvenile coho salmon and cutthroat trout, and providing passage for adult salmon returning to the waters of their birth to spawn.

Shannon George, External Affairs, Anchorage, Alaska

Restoring a Chain of Habitat, One Link at a Time

The glacially-fed 1.4 million-acre Kenai River drainage includes two large lakes, numerous tributaries and 82 miles of the river bearing its name on Alaska's Kenai Peninsula. The drainage is home to 37 species of fish, including five species of Pacific salmon, rainbow trout and Dolly Varden char, and supports a variety of commercial, sport and personal use fisheries.

The Kenai River has two distinct sections, separated by 15 miles of Skilak Lake. The upper river flows 17 miles between Kenai and Skilak lakes, while the lower stretch is 50 miles long, running from Skilak Lake to Cook Inlet. Along this course, the waterway crosses a complex patchwork of federal, state, private and municipal lands. The lower river is the more developed of the two; fully 85 percent of its frontage lots are privately owned.

The Kenai's popularity among sport anglers increased dramatically following large sockeye salmon returns from 1987 to 1989. Word quickly spread that sockeyes could be caught from shore and thousands of anglers responded to the call. In addition, eager anglers in hundreds of boats come each year hoping to tangle with sockeyes, cohoes or the world famous Kenai River chinook (king) salmon.

Much of the Kenai can be reached by road. This accessibility, coupled with its diverse angling opportunities, has made the river the most heavily sport-fished stream in Alaska. Its popularity has brought problems, including:

- bank trampling by shore anglers,
- an increased demand for—and development of—riverside properties, and
- erosion caused by the wakes of fishing boats.

Take me fishing. *A happy young angler catches a small Chinook on the Classic Fish Walk behind the Soldatna Visitor Center. FWS photo.*

These impacts have all contributed to an alarming loss of prime fish habitat. Though the sport fishery has brought great economic development to the communities located along the river, it has also inadvertently threatened the vitality of the salmon populations upon which much of the local economy depends.

When undisturbed, the riverbank vegetation overhangs and enters the water to create a narrow and essential ribbon of life. This slender corridor of grasses, willows, fallen trees, roots and undercut banks offers juvenile salmon protection from predators. Wherever a section of bank has been trampled, developed, or eroded, this loss of habitat decreases the odds of survival for a portion of a new generation of fish. Cumulatively, these hundreds of small bits of degraded riverbank add up to a significant threat to the Kenai's salmon populations.

To remedy this situation, the Service's Kenai Fishery Resource Office, in partnership with other federal, state and local agencies, has been working to protect and restore the banks of the Kenai River. The first effort began in 1994 in Soldotna Creek Park. This landmark project was partially funded through the Coastal America Program, which was established to protect, preserve and restore coastal watersheds by integrating Federal actions with State and local government and non-governmental efforts.

In 1995, building upon the momentum of that first successful effort, the Partners program began developing innovative approaches to offer private landowners affordable ways to restore their river frontage. Since 1995, Partners has crafted 206 agreements with landowners along the Kenai River. About 14 percent all privately owned riverbank parcels in a 40-mile stretch of river have been or will be restored.

The restoration methods for each project are dictated by the riverbank conditions, the level of the landowner's willingness to restore the habitat, and available funding. Typical actions include installing walkways and river access stairs to prevent bank trampling; using coir (plant fiber) logs, spruce tree revetments and/or root wads to restore damaged banks; and removing manmade jetties and bulkheads to restore the riverbank.

Revegetation techniques are diverse and include using dormant shrub cuttings, hedge- brush layering and grass rolls, as well as transplanting rooted plants. In addition to these protection and revegetation strategies, the Service, state of Alaska and city of Soldotna have implemented riverbank closures, improved public access to the river and increased public awareness.

The Partners for Fish and Wildlife Program is one of the cornerstones of this cooperative effort to protect and maintain the Kenai River's magnificent fishery resources. One parcel and one partner at a time, the Service is working with others to join together links in a chain of riverbank habitat, for the good of the river, its salmon and the people who enjoy and depend upon them.

Ken Gates and Mary Price, Kenai NWR, Soldotna, Alaksa

This Project Has Horse Power!

Born high in the slopes of the Talkeetna Mountains northwest of the town of the same name, Wasilla Creek is a clear-water stream that rolls and tumbles some 18 miles before emptying into Cook Inlet's Upper Knik Arm.

Like many of south-central Alaska's small waterways, it has historically played a number of key environmental roles. Wasilla Creek provides spawning and rearing habitat for chinook, coho, sockeye and pink salmon, supports resident populations of grayling and rainbow trout, and serves as a migration corridor for moose moving from the Talkeetna Mountains to their winter range on the Palmer Hay Flats.

But, like many of those same southern Alaska waterways, this productive little stream has felt the impact of development. Cattle grazing has trampled vegetation and denuded its banks, increasing erosion and siltation into spawning areas. Even well-meaning homeowners along the creek have inadvertently made the stream less hospitable to the fish it supports by removing riparian vegetation and in-stream woody debris.

"Human eyes like 'order,' and people often remove fallen trees from streams on their property," explained former Service biologist Jo Christensen.

Homeowners may love salmon, but they may not realize the importance of plants and natural in-stream structures (rocks, logs, plant debris) have as fish habitat. Salmon require complex in-stream habitat, such as gravel areas with riffles for feeding and spawning and large, deep pools for resting. By "cleaning" up Wasilla Creek, some of the landowners unwittingly eliminated such essential habitat components. The stage was set for a unique partnership project when Scott Peterson purchased a 70-acre ranch along the creek in 1998 and knew the little waterway needed help. He said, "We've found car parts and an old car in the creek," Peterson told the Anchorage Daily News. "We've spent a lot of time cleaning up."

He knew that simply clearing trash from the stream wouldn't restore "his" piece of Wasilla Creek to productive health, so he turned to the Partners program for assistance.

Horsepower. *Handler Rod Hutchinson and the horses pull a log from the yard of downed logs and toward the woods buffering Wasilla Creek. FWS photo: Maureen de Zeeuw.*

In response, Christensen outlined a partnership plan: the Service would place approximately 30 birch and spruce tree logs at nine locations along a 1,000-foot stretch of Wasilla Creek. Following completion of this stage of the project, Peterson would permanently fence a 250-foot riparian buffer (125 feet on each side of the stream) to keep cattle from overgrazing and trampling the banks.

In essence, Peterson would convert approximately 25 acres of his land from cattle production to salmon production.

It was the method that Christensen suggested for getting the tree trunks in the creek that raised a few Alaskan eyebrows. She knew hauling the logs in with heavy equipment would further damage the streambanks. She had worked on a number of habitat restoration projects in Oregon and had seen a better way to do the job—horse power.

At her suggestion, Bureau of Land Management biologist Michael Kellett of Oregon, came to Alaska to share his experience with using draft horses for similar projects. The horses came from the nearby town of Palmer, where Linda Shue and Rod Hutchinson operate Rocking H Horse packers. Their two huge Belgian draft horses, Lucy and her daughter Lily, usually earn their keep from sleigh rides, logging projects and general haul work. This new job presented new challenges for the experienced team because it required them to start, stop, and maneuver with unusual precision.

"Our project needed 'on-the-job training' for Lucy and Lily," said the Service's Maureen de Zeeuw after one site visit. "These remarkable animals and their handlers were quick learners. They started the job on Monday, May 15, and by Wednesday morning they were working at full efficiency!"

The task was completed in five days. Each log was placed so at least half of the trunk stayed on the creek bank. The logs were positioned in places likely to accumulate sediments or between standing trees that provided natural anchors. The positions of logs were based on calculations of the river's hydrology and geomorphology to ensure that river energy is dissipated and sediments are transported.

"We've put the key pieces in," said Michel Kelett when the job was finished, "but the real magic will happen at high water, when smaller wood begins to catch on the logs we've put here. What we've done essentially is install trash racks. They won't really kick in as habitat for a couple of years."

The Partners program contributed about 78 percent of the cost of the project and Scott Peterson provided the remaining 22 percent. As a result of this partnership, 1,000 feet of Wasilla Creek has a new lease on life. The groundwork was laid for improved habitat and for a future richer in salmon, grayling and trout. And it was all done without a single piece of heavy equipment grinding and chewing its way though stream-side habitat.

It's often been said that the Partners for Fish and Wildlife program simply makes good sense. In this case, you might call it "horse sense."

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End Partners Special Section